

REMARKS

Applicants respectfully request further examination and reconsideration in view of the arguments set forth fully below. Claims 1-34 were previously pending in this application. Within the Office Action, Claims 1-34 have been rejected. Accordingly, Claims 1-34 are currently pending.

Rejections Under 35 U.S.C. § 103

Within the Office Action, Claims 1-21 and 25-34 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Darrell et al., “Integrated person tracking using stereo, color, and pattern detection” (“Darrell”) in view of Davis et al., “Context Tailor: Towards a Programming Model for Context-Aware Computing,” (“Davis”). The Applicants respectfully disagree. The combination of Darrell and Davis is improper and neither Darrell nor Davis teach comparing a detected activity pattern against a plurality of user action identification profiles, wherein each user action identification profile is associated with a particular unique user by at least one activity performed by the particular unique user individually.

Davis teaches a programming model for customized context-aware applications. Specifically, Davis teaches that applications customize their execution to expected needs of a user based on patterns of repetitive context. As recognized within the Office Action however, Davis does not teach identifying the current user as being one of the particular users. [Davis, section 1, para. 1] This is because the purpose of Davis is to design applications that customize themselves based on patterns of use regardless of the user. In other words, the programs track how they are used and adjust accordingly even if there is a different user each time. As a result, Davis does not care who the user is or even the number of users, so there is certainly no need for Davis to distinguish between the current user and any particular user. Furthermore, Davis does not teach comparing the detected activity pattern against a plurality of user action identification profiles. Davis merely teaches classifying an event as recurring or rare, if the event falls within a pattern, and the length of the event. [Davis, section 3, para. 1] In fact, because at no point does Davis track the identification of any one user, it is impossible for Davis to store user action identification profiles, much less compare the detected activity pattern against them. As a result, Davis does not teach comparing the detected activity pattern against a plurality of user action identification profiles. Accordingly, Davis does not teach the present invention.

Darrell teaches a visual person tracking system. Darrell teaches tracking persons in a video scene using three visual processing modules, each for conducting depth estimation, detecting color segmentation and discriminating head regions from hands and other body parts. [Darrell, section 2, para. 2] Darrell teaches that stereo cameras are used to observe the attributes of a person and the observed attributes are compared with stored statistics of previous tracked users. [Darrell, section 5.2, para. 1] In one embodiment, Darrell teaches that the stored attributes include a face pattern, height, and color observations of a user. [Darrell, section 5.2, para. 2] However, like Davis, Darrell does not teach comparing the detected activity pattern against a plurality of user action identification profiles, wherein each user action identification profile is associated with a particular unique user. Darrell merely teaches comparing invariable attributes such as face patterns, height and color observations of previous tracked users, not actions or other dynamic data. Accordingly, Darrell does not teach the present invention.

Additionally, there is no motivation to warrant the combination of Davis and Darrell. There is simply no hint, teaching or suggestion in either of Davis or Darrell to warrant their combination. This is a classic case of impermissibly using hindsight to make a rejection based on obviousness. The Court of Appeals for the Federal Circuit has stated that “it is impermissible to use the claimed invention as an instruction manual or ‘template’ to piece together the teachings of the prior art so that the claimed invention is rendered obvious.” In Re Fritch, 972 F.2d, 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992). As recognized within the Office Action, Davis does not teach to identify the current user as being one of the particular users. Within the Office Action, it is stated that

[i]t would have been obvious for one of ordinary skill in the art at the time of the to modify the claimed invention to combine the teachings of Darrell and Davis for the motivation of better tracking persons.

However, it is only with the benefit of the present claims, as a “template” that there is any motivation to combine the identification of a particular user of Darrell with the monitoring of the use of applications of Davis. No such motivation can be found in the teachings of either of the references. To conclude that the combination of Davis and Darrell is obvious, based on the teachings of these references, is to use hindsight based on the teachings of the present invention and to read much more into Davis and Darrell than their actual teachings. This is simply not permissible based on the directive from the Court of Appeals for the Federal Circuit.

It is well settled that to establish a *prima facie* case of obviousness, three basic criteria must be met:

- 1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;
- 2) there must be a reasonable expectation of success; and
- 3) the prior art reference, or references, must teach or suggest all the claim limitations. MPEP § 2143.

The burden of establishing a *prima facie* case of obviousness based on the teachings of Davis and Darrell has not been met within the Office Action.

There is no hint, teaching or suggestion within either Davis or Darrell that justifies their combination. Within the Office Action, the improper combination is justified because it is stated that it would allow the better tracking of persons. The Applicants respectfully disagree. No citation from either Davis or Darrell is provided within the Office Action that comes close to supporting this improper conclusion. More is required to justify the combination of two references. As described above, Davis is not concerned with identifying or tracking the user because the customization of the applications is performed based on the actions of any and all users of the application. Therefore, incorporating the better tracking of persons provided by Darrell would not be of any motivation to Davis. Thus, there is simply no hint, teaching or suggestion within either of these references that warrants or justifies their combination. Accordingly, for this reason alone the combination of Davis and Darrell is improper.

However, Davis and Darrell also cannot be properly combined because the combination would change their principle operation. Specifically, the MPEP states “[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.” In re Ratti, 270 F.2d 810, 123 (CCPA 1959); MPEP §2143.01. The principle operation of Davis is to input patterns of repetitive context (i.e., manners of interaction with an application) in order for that application to self customize based on that context regardless of the user or combination of users who did the interacting. In other words, the applications of Davis are designed to self customize based on interaction with users regardless of any one particular user’s interaction. In contrast, the principle operation of Darrell involves a passive tracking device, wherein data specific to each “user” is collected and kept separate. Further, in the principle operation of Darrell these specific “users” do not interact with

the device, but instead the device monitors how the “users” interact around the device in order to identify them. In other words, the principle operation of Darrell involves specifically tracking each user without the user interacting with the device. Thus, in order to modify Davis to include Darrell or Darrell to include Davis, their principle methods of operation would need to be changed. Either, Davis would need to be altered so that it both tracked each user and monitored user action around the application, but not with the application, or Darrell would need to be altered so that it both input data regardless of the user and provided a way for the user’s to interact with the device. It is clear that either modification would completely change the principle operation of each reference. A passive tracking device like Darrell would never be able to interact with the persons (e.g. criminals) it was trying to track and an application self customization process like Davis would never be able to collect the passive data of the user’s actions around the application nor would such actions be applicable to the desired customization. Accordingly, the combination of Darrell and Davis is also improper because it would alter their principle modes of operation.

Furthermore, the combination of Davis and Darrell is improper because to rely on a reference under 35 U.S.C. §103, it must be analogous prior art according to MPEP 2141.01(a). Specifically, “the reference must either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.” In re Oetiker, 977 F.2d 1443, 1446 (Fed. Cir. 1992). Here, if the field of the applicant’s endeavor is construed to be identifying particular users, then Davis is nonanalogous art because it does not relate to that field nor does it try and solve that problem. In fact, as described above, Davis is designed to self customize the application regardless of any particular user. Additionally, if the field of the applicant’s endeavor is construed to be inputting interaction data, then Darrell is nonanalogous art because it does not interact with any users nor does it try to solve such a problem. In fact, as described above, it is highly unlikely that a monitoring device like Darrell would be able to interact with its “users.” Accordingly, either Davis or Darrell will be nonanalogous art and as a result, Davis and Darrell are not able to be combined to form a proper §103 rejection.

In sum, as described above, even if considered proper, neither Davis, Darrell nor their combination teach the presently claimed invention. Also, there is no motivation to combine the teachings of Davis with the teachings of Darrell. Furthermore, even if there were motivation to combine Davis and Darrell the combination is impermissible because it would result in a drastic change in their principle operation. Moreover, Davis and Darrell cannot be properly combined

because they are nonanalogous art. Accordingly, the combination of Davis and Darrell is improper and should be withdrawn.

The independent Claim 1 is directed to a method of identifying a user comprising detecting a user's electronic device activity pattern, comparing the detected activity pattern against a plurality of user action identification profiles stored in a memory device, wherein each user action identification profile is associated with a particular unique user by at least one activity performed by the particular unique user, and using the comparing to identify the current user as being one of the particular users. Within Claim 1 it is recited that the detected activity pattern is compared against a plurality of user action identification profiles. It is further recited in Claim 1 that each user action identification profile is associated with a particular unique user, and the current user is identified as being one of the particular users. As described above, there is no motivation to combine the teachings of Davis with the teachings of Darrell. As further described above, even if there were motivation to combine Davis and Darrell the combination is impermissible because it would result in a drastic change in their principle operation. Moreover as described above, Davis and Darrell cannot be properly combined because they are nonanalogous art. As also described above, neither Davis, Darrell nor their combination teach comparing the detected activity pattern against a plurality of user action identification profiles, wherein each user action identification profile is associated with a particular unique user by an activity performed by the particular unique user. For at least these reasons, the independent Claim 1 is allowable over the teachings of Darrell, Davis and their combination.

Claims 2-9 are all dependent upon the independent Claim 1. As discussed above, the independent Claim 1 is allowable over the teachings of Darrell, Davis and their combination. Accordingly, the Claims 2-9 are all also allowable as being dependent upon an allowable base claim.

The independent Claim 10 is directed to a system comprising means for detecting a user's electronic device activity pattern, means for comparing the detected activity pattern against a plurality of user action identification profiles stored within a memory device, wherein each user action identification profile is associated with a particular unique user by at least one activity performed by the particular unique user, and means for using the comparing to identify the current user as being one of the particular users. Within Claim 10 it is recited that the means for comparing is used to compare the detected activity pattern against a plurality of user action identification profiles stored in a memory device. As described above, there is no motivation to combine the teachings of Davis with the teachings of Darrell. As further described above, even if

there were motivation to combine Davis and Darrell the combination is impermissible because it would result in a drastic change in their principle operation. Moreover as described above, Davis and Darrell cannot be properly combined because they are nonanalogous art. As also described above, neither Davis, Darrell nor their combination teach comparing the detected activity pattern against a plurality of user action identification profiles, wherein each user action identification profile is associated with a particular unique user by an activity performed by the particular unique user. For at least these reasons, the independent Claim 10 is allowable over the teachings of Darrell, Davis and their combination.

The independent Claim 11 is directed to a method comprising comparing a user's activity pattern against a plurality of user action identification profiles stored in a memory device, wherein each user action identification profile is associated with a particular unique user by at least one activity performed by the particular unique user and wherein the current user's activity includes an input selection and using the comparing to identify the current user as being one of the particular users. Within Claim 11 it is recited that the user's activity pattern is compared against a plurality of user action identification profiles and that the user's activity includes an input selection. It is further recited in Claim 11 that each user action identification profile is associated with a particular unique user by at least one activity performed by the particular unique user, and the current user is identified as being one of the particular users. As described above, there is no motivation to combine the teachings of Davis with the teachings of Darrell. As further described above, even if there were motivation to combine Davis and Darrell the combination is impermissible because it would result in a drastic change in their principle operation. Moreover as described above, Davis and Darrell cannot be properly combined because they are nonanalogous art. As also described above, neither Davis, Darrell nor their combination teach comparing the detected activity pattern against a plurality of user action identification profiles, wherein each user action identification profile is associated with a particular unique user by an activity performed by the particular unique user. For at least these reasons, the independent Claim 11 is allowable over the teachings of Darrell, Davis and their combination.

Claims 12-20 are all dependent upon the independent Claim 11. As discussed above, the independent Claim 11 is allowable over the teachings of Darrell, Davis and their combination. Accordingly, the Claims 12-20 are all also allowable as being dependent upon an allowable base claim.

The independent Claim 21 is directed to a method comprising determining a particular user's identity, detecting the particular user's activity pattern, and storing the particular user's activity pattern within a user action identification profile in a memory device, wherein the user action identification profile is configured to be compared with an unknown user's activity pattern against at least one activity performed by the particular unique user. Within Claim 21 it is recited that an unknown user's activity pattern is compared against a stored user action identification profile. It is further recited in Claim 21 that the stored user action identification profile includes a particular detected user's activity pattern. As described above, there is no motivation to combine the teachings of Davis with the teachings of Darrell. As further described above, even if there were motivation to combine Davis and Darrell the combination is impermissible because it would result in a drastic change in their principle operation. Moreover as described above, Davis and Darrell cannot be properly combined because they are nonanalogous art. As also described above, neither Davis, Darrell nor their combination teach comparing the detected activity pattern against a plurality of user action identification profiles, wherein each user action identification profile is associated with a particular unique user by an activity performed by the particular unique user. For at least these reasons, the independent Claim 21 is allowable over the teachings of Darrell, Davis and their combination.

Claims 25 and 26 are both dependent upon the independent Claim 21. As discussed above, the independent Claim 21 is allowable over the teachings of Darrell, Davis and their combination. Accordingly, the Claims 25 and 26 are both also allowable as being dependent upon an allowable base claim.

The independent Claim 27 is directed to an identification system comprising a detection module configured for detecting a user's activity pattern, and a comparator module configured for comparing the user's activity pattern to a user action identification profile stored within a memory device, wherein the comparator module is configured to determine a user's identity based on scoring a comparison between the user's activity pattern and the user action identification profile comprising at least one activity performed by the user. Within Claim 27 it is recited that a comparator module is configured to determine a user's identity based on scoring a comparison between the user's activity pattern and a user action identification profile comprising at least one activity performed by the user. As described above, there is no motivation to combine the teachings of Davis with the teachings of Darrell. As further described above, even if there were motivation to combine Davis and Darrell the combination is impermissible because it would result in a drastic change in their principle operation. Moreover as described above, Davis and

Darrell cannot be properly combined because they are nonanalogous art. As also described above, neither Davis, Darrell nor their combination teach comparing the detected activity pattern against a plurality of user action identification profiles, wherein each user action identification profile is associated with a particular unique user by an activity performed by the particular unique user. For at least these reasons, the independent Claim 27 is allowable over the teachings of Darrell, Davis and their combination.

Claims 28-31 are all dependent upon the independent Claim 27. As discussed above, the independent Claim 27 is allowable over the teachings of Darrell, Davis and their combination. Accordingly, the Claims 28-31 are all also allowable as being dependent upon an allowable base claim.

The independent Claim 32 is directed to a method comprising detecting a user's electronic device activity pattern, storing the user's activity pattern in a memory storage device within a user action identification profile comprising at least one activity by the user, comparing the detected activity pattern against a plurality of user action identification profiles, wherein each user action identification profile is associated with a particular unique user, using the comparing to identify the current user as being one of the particular users, and continuing to update the user's stored activity pattern after identifying the user. As described above, there is no motivation to combine the teachings of Davis with the teachings of Darrell. As further described above, even if there were motivation to combine Davis and Darrell the combination is impermissible because it would result in a drastic change in their principle operation. Moreover as described above, Davis and Darrell cannot be properly combined because they are nonanalogous art. As also described above, neither Davis, Darrell nor their combination teach comparing the detected activity pattern against a plurality of user action identification profiles, wherein each user action identification profile is associated with a particular unique user by an activity performed by the particular unique user. For at least these reasons, the independent Claim 32 is allowable over the teachings of Darrell, Davis and their combination.

The independent Claim 33 is directed to an identification system comprising a detection module to detect a user's activity pattern, a storage module to store the user's activity pattern within a user action identification profile comprising at least one activity by the user, and a comparator module to compare the user's activity pattern to the user action identification profile, wherein the comparator module determines a user's identity based on scoring a comparison between the user's activity pattern and the user action identification profile. As described above, there is no motivation to combine the teachings of Davis with the teachings of Darrell. As

further described above, even if there were motivation to combine Davis and Darrell the combination is impermissible because it would result in a drastic change in their principle operation. Moreover as described above, Davis and Darrell cannot be properly combined because they are nonanalogous art. As also described above, neither Davis, Darrell nor their combination teach comparing the detected activity pattern against a plurality of user action identification profiles, wherein each user action identification profile is associated with a particular unique user by an activity performed by the particular unique user. For at least these reasons, the independent Claim 33 is allowable over the teachings of Darrell, Davis and their combination.

Claim 34 is dependent upon the independent Claim 33. As discussed above, the independent Claim 33 is allowable over the teachings of Darrell, Davis and their combination. Accordingly, the Claim 34 is also allowable as being dependent upon an allowable base claim.

Within the Office Action, Claims 22-24 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Darrell and Davis in view of Seno et al., "Network authentication system with multi-biometric," ("Seno"). Claims 22-24 are all dependent upon the independent Claim 21. As discussed above, the independent Claim 21 is allowable over the teachings of Darrell, Davis and their combination. Accordingly, the dependent Claims 22-24 are all also allowable as being dependent upon an allowable base claim.

For the reasons given above, Applicants respectfully submit that all of the pending claims are now in condition for allowance, and allowance at an early date would be greatly appreciated. Should the Examiner have any questions or comments, they are encouraged to call the undersigned at (408) 530-9700 to discuss the same so that any outstanding issues can be expeditiously resolved.

Respectfully submitted,
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